

Work Order ID 161634

Friday, May 19, 2017 10:47:40 AM

161634

Page 1

Item ID: D4048-8

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Mounting Lug

Start Date: 5/23/2017 Start Qty: 6.00

6

Cust Item ID:

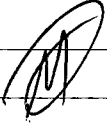
Required Date: 6/1/2017 Req'd Qty: 6.00

6

Customer:

Reference: SCHEDULED/C

Approvals:

Process Plan: 

Date: MAY 19 2017

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D4048

A

100

0.00

100

Bandsaw

Memo

0.00

Jeaspa Bandsaw

CUT BLANK 7.320" LONG

6 ~~0~~ 17-05-21

110

0.00

110

HAAS 1

Memo

11.34

HAAS CNC vertical machine #1

MILL AS PER DWG AND FOLIO FA899

DWG REV: 1FOLIO REV: AA

DEBURR

5 1 DAS 20 17-05-23
9-89

NCR ->

DQA: _____ Date: 17-05-23

QA Closed: *K/M*

Date: JUL 04 2017

WORK ORDER NON-CONFORMANCE / UPDATE

Work Order update only ☐**DART**
AEROSPACE

Work Order: <u>161 634</u> Part No. <u>D4048-8</u> NCR No. <u>17-6503</u>		DISPOSITION Rework ☐ Scrap ☒ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube</td><td>☐</td> <td style="width:15%;">Cross tube</td><td>☐</td> <td style="width:15%;">Water Jet</td><td>☐</td> <td style="width:15%;">Engineering</td><td>☐</td> </tr> <tr> <td>Machining</td><td>☒</td> <td>Small Fab</td><td>☐</td> <td>Prod. Eng. Coord.</td><td>☐</td> <td>Quality</td><td>☐</td> </tr> <tr> <td>Thermoforming</td><td>☐</td> <td>Finishing</td><td>☐</td> <td>Rec/Store/Packaging</td><td>☐</td> <td>Other</td><td>☐</td> </tr> <tr> <td>Large Fab</td><td>☐</td> <td>Composite</td><td>☐</td> <td>Supplier</td><td>☐</td> <td></td><td></td> </tr> </table>						Skid-tube	☐	Cross tube	☐	Water Jet	☐	Engineering	☐	Machining	☒	Small Fab	☐	Prod. Eng. Coord.	☐	Quality	☐	Thermoforming	☐	Finishing	☐	Rec/Store/Packaging	☐	Other	☐	Large Fab	☐	Composite	☐	Supplier	☐																				
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Date: <u>17-05-23</u>		Step #: <u>110</u>		QTY Effective: <u>1 10</u>			MRB (QSI042) Approval DAS 9 9-89 <u>17-05-23</u>																																																				
Description Work Order Deviation Did not place part correctly on the jig. Machined thru the pockets				Disposition Scrap destroy no replace				Completed By DAS 20 9-89 <u>17-05-23</u> Lead hand / Supervisor Approval Verification <u>D.A 17-05-23</u> QC / QA Coordinator DAS Approval 9 9-89 <u>17-05-23</u>																																																			
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Page 2

Item ID: D4048-8 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Mounting Lug
Start Date: 5/23/2017 Start Qty: 6.00 ***6*** Cust Item ID:
Required Date: 6/1/2017 Req'd Qty: 6.00 ***6*** Customer:
Reference: SCHEDULED/C

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC2- Inspect parts off machine FAI/FAIB Memo	0.00 0.00				2	(3)		DAS 20 9-89 17-05-23 PTC
130 *130* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00				2	0		DAS 08 9-09 B.A 17-06-18
140 *140* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.61				(X2)	0		20170619 BER

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: <u>161634</u> Part No. <u>D4048-8</u> NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☒ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube ☐</td> <td>Cross tube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☒</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☒	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																															
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Description Work Order Deviation				Disposition		DAS 12 9-89 <u>17/6/9</u> Completed By DAS 12 9-89 <u>17/6/9</u> Lead hand / Supervisor Approval Verification <u>PD 17-06-13</u> QC / QA Coordinator Approval <u>PD 17-06-13</u>																																																																	
pocket on one side of lug is too big which cause dimension .125 to be .107 (.008 under tolerance)				Acceptable. Sectional area/moment of inertia (.876 in ² / 1.181 in ⁴) is within what is allowed by the tolerances of D4048. Part has the expected strength.																																																																			
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161634

Page 3

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Revision ID: Stop ***NS2***
Item Name: Mounting Lug
Start Date: 5/23/2017 Start Qty: 6.00 ***6*** Cust Item ID:
Required Date: 6/1/2017 Req'd Qty: 6.00 ***6*** Customer:
Reference: SCHEDULED/C

Approvals: Process Plan: Date: Tooling: Date: Run Start ***NR1***
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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150 *150* Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum <i>M 137176</i> Memo ***Mask 0.257" holes and indicated channel prior to powder coat*** POWDER COAT Start Time: <i>2:05</i> Oven Temperature: <i>320°</i> Finish Time: <i>2:35</i>	0.00 1.51				<i>2</i>	<i>0</i>	<i>17-06-19</i>	<i>238</i>
160 *160* QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00				<i>2</i>			<i>DAS</i> <i>38</i> <i>9-89</i> <i>JUN 20 2017</i>
170 *170* Packaging Packaging	Identify as per dwg & Stock Location: <i>STORY</i> Memo	0.00 0.00				<i>2</i>			<i>DAS</i> <i>6</i> <i>9-89</i> <i>JUN 20 2017</i>

DQA:

Date: 2017-07-10



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date: JUL 04 2017

Work Order update only ☐

Work Order: <u>161634</u> Part No. <u>D4048-8</u> NCR No. <u>17-6504</u>		DISPOSITION Rework ☐ Scrap ☒ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube ☐</td> <td>Cross tube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☒</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☒	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																	
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Description Work Order Deviation				Disposition		Completed By DAS <u>20</u> 9-89 <u>17-06-15</u>																																																																	
Part lift causing the ballmill to go too deep in the part B.C. tooling clamping system not adequate				scrap destroy qty 3x no replace Revise tooling clamping system <u>JE</u> <u>17/07/04</u>		Lead hand / Supervisor Approval Verification <u>B.A</u> <u>17-06-14</u>																																																																	
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OTHER :																																																																							

Work Order ID 161634

161634

Page 4

Friday, May 19, 2017 10:47:40 AM

Item ID: D4048-8 Accept *N900040100* Setup Start *NS1*
Revision ID: Stop *NS2*
Item Name: Mounting Lug
Start Date: 5/23/2017 Start Qty: 6.00 *6* Cust Item ID:
Required Date: 6/1/2017 Req'd Qty: 6.00 *6* Customer:
Reference: SCHEDULED/C

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	QC21- Final Inspection - Work Order Release	0.00							
180									
QC	Memo	0.00							
Quality Control									

DAS
21
9-89 JUN 2 n 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Picklist Print

Friday, May 19, 2017 10:47:39 AM

Page 1

Work Order ID: 161634

161634

Parent Item: D4048-8

D4048-8

Parent Item Name: Mounting Lug

Start Date: 5/23/2017

Required Date: 6/1/2017

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP REV:A NEW ISSUE JLM 10-01-26 VERIFIED BY:EC IPP Rev:B
as per dwg revA DD 10.02.18 verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B1.500X04.00 0		Purchased		No		100	f	9.7917	0.61	3.852632			

M6061T6B1 500X04 000

**

6061T6 Bar 1.500 x 4.00

Location

Loc Qty

Loc Code

MAT004

9.7917

→ M126075

4.4317

→ M132797

5.36

1.83

1.83

Kt 1705-21

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Misidentified ☐	Past Due ☐																																																																

DART AEROSPACE LTD		Work Order:	161634
Description: Mounting Lug		Part Number:	D4048-8
Inspection Dwg: D4048 Rev: A		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

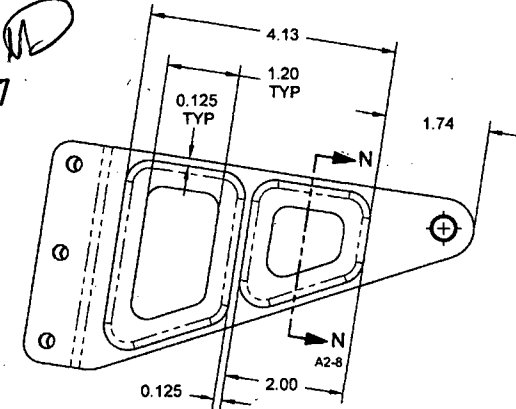
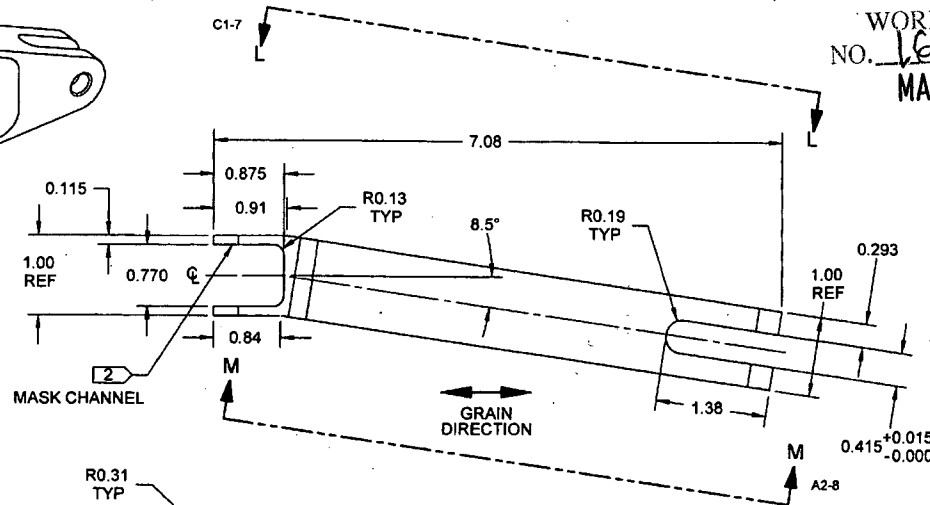
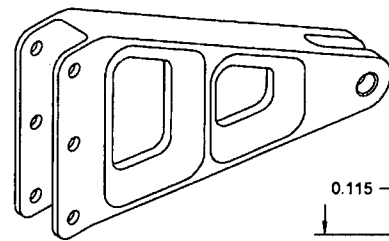
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
4.13	+/-0.030	4.125	✓		SLIO	Veria
1.20	+/-0.030	1.201	✓			
0.125	+/-0.010	.123	✓			
1.74	+/-0.030	1.735	✓			
2.00	+/-0.030	2.000	✓			
0.125	+/-0.010	.123	✓			
1.95	+/-0.030	1.951	✓			
0.53	+/-0.030	.516	✓			
26°	+/-0.5°	26°	✓		Protractor	
0.435 x 45°	+/-0.010 x +/-0.5°	.430x45°	✓		SLIO	
R0.50	+/-0.030	.500	✓		Rad gauge	
Ø0.375	+0.006/-0.001	.376	✓			
1.79	+/-0.030	1.785	✓			
0.93	+/-0.030	.923	✓			
R0.31	+/-0.030	.310	✓		Rad gauge	
3.75	+/-0.030	3.742	✓			
3.000	+/-0.010	3.000	✓			
Ø0.257	+0.006/-0.001	.258	✓			
1.500	+/-0.010	1.500	✓			
0.38	+/-0.030	.370	✓			
0.375	+/-0.010	.367	✓			
0.400	+/-0.010	.399	✓			
R0.13	+/-0.030	.125	✓		Rad gauge	
0.200	+/-0.010	.200	✓			
1.00	+/-0.030	.997	✓			
1.00	+/-0.030	.998	✓			
0.115	+/-0.010	.112	✓			
0.770	+/-0.010	.770	✓			
0.875	+/-0.010	.865	✓			
R0.13	+/-0.030	.125	✓		Rad gauge	
0.293	+/-0.010	.288	✓			
0.415	+0.015/-0.000	.417	✓			
1.38	+/-0.030	1.379	✓			
7.08	+/-0.030	7.065	✓			

Measured by:	20 0.00	Audited by:	B.0	Preliminary Approval:	
Date:	17-05-23	Date:	17-06-18	Date:	

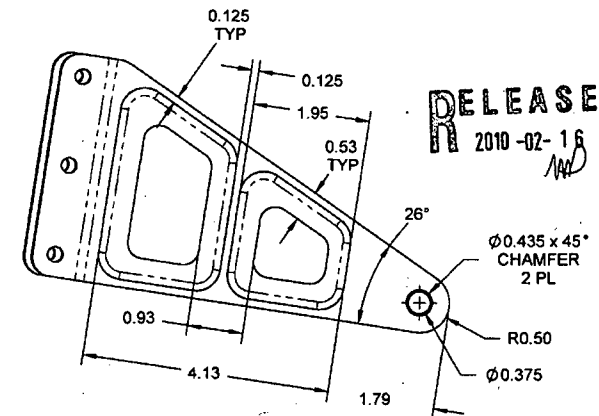
Rev	Date	Change	Revised by	Approved
A	10.06.08	New Issue	KJ	

SHOP COPY
RETURN TO
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UNCONTROLLED

SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 161634
MAY 19 2017



VIEW L-L 87-8



VIEW M-M C4-8

SECTION N-N C1-8

NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) BAR
PER AMS-QQ-A-225/8 (OR 4117/4128/4115/4118)
PER AMS-QQ-A-200/8 (OR AMS 4160)
REF DART SPEC. M6061T6B
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
MASK Ø0.257 HOLES AND INDICATED CHANNEL (ZN C7-8)
PRIOR TO POWDER COAT
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4048-8" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.62 lbs

D4048-8 MOUNTING LUG

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	RF	DRAWING NO.	REV. A
MFG. APPR.	RF	D4048	SHEET 8 OF 9
APPROVED	RF	TITLE	SCALE
DE APPR.	RF	MOUNTING LUG ASSY	NTS
DATE	10.01.29	COPYRIGHT © 2010 BY DART AEROSPACE LTD	
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